AMENDMENTS TO THE CLAIMS

1. (Currently amended): A method for use in free-space communications, comprising the steps of:

transmitting data in an active mode in an optical signal through a free-space optical path of a communication link extending across a terrestrial free-space region;

detecting degradation of the optical signal in the terrestrial free-space region; and

automatically switching from the active mode to a standby mode upon optical beam degradation in the terrestrial free-space region, wherein the standby mode includes transmitting data in a radio frequency (RF) signal through a free-space RF path of the communication link;

wherein an RF transceiver for generating the RF signal is active during the active mode and transmitting.

2. (Original): A method in accordance with claim 1, further comprising the step of:

communicating control and status information in the RF signal through the free-space RF path of the communication link.

3. (Original): A method in accordance with claim 1, wherein the step of detecting degradation of the optical signal in the terrestrial free-space region comprises the step of:

sensing a characteristic of a received optical signal.

4. (Original): A method in accordance with claim 3, wherein the characteristic of the received optical signal comprises a power level of the received optical signal.

5. (Original): A method in accordance with claim 3, wherein the characteristic of the received optical signal comprises a transmissive capability of the received optical signal.

6. (Original): A method in accordance with claim 3, further comprising the step of:

using the characteristic of the received optical signal to calculate a power adjustment for a station at an opposite end of the communication link.

7. (Original): A method in accordance with claim 1, wherein the degradation of the optical signal is due to atmospheric conditions in the terrestrial free-space region.

8. (Currently amended): An apparatus for use in free-space communications, comprising:

means for transmitting data in an active mode in an optical signal through a free-space optical path of a communication link extending across a terrestrial free-space region;

means for detecting degradation of the optical signal in the terrestrial free-space region; and

means for automatically switching from the active mode to a standby mode upon optical beam degradation in the terrestrial free-space region, wherein the standby mode includes transmitting data in a radio frequency (RF) signal through a free-space RF path of the communication link;

wherein an RF transceiver for generating the RF signal is active during the active mode and transmitting.

9. (Original): An apparatus in accordance with claim 8,

further comprising:

means for communicating control and status information in the RF signal through the free-space RF path of the communication link.

10. (Original): An apparatus in accordance with claim 8, wherein the means for detecting degradation of the optical signal in the terrestrial free-space region comprises:

means for sensing a characteristic of a received optical signal.

11. (Original): An apparatus in accordance with claim 10, wherein the characteristic of the received optical signal comprises a power level of the received optical signal.

12. (Original): An apparatus in accordance with claim 10, wherein the characteristic of the received optical signal comprises a transmissive capability of the received optical signal.

13. (Original): An apparatus in accordance with claim 10, further comprising:

means for using the characteristic of the received optical signal to calculate a power adjustment for a station at an opposite end of the communication link.

14. (Original): An apparatus in accordance with claim 8, wherein the degradation of the optical signal is due to atmospheric conditions in the terrestrial free-space region.

15. (Currently amended): A method for use in communications, comprising the steps of:

transmitting data in an optical signal through a free-space optical path of a communication link extending through a terrestrial free-space region;

detecting degradation of the optical signal; and

transmitting data through a backup communication path in response to detected degradation of the optical signal;

wherein the backup communication path is active and transmitting while data is being transmitted in the optical signal.

16. (Original): A method in accordance with claim 15, further comprising the step of:

communicating control and status information in the backup communication path concurrently with the transmission of data in the optical signal.

17. (Original): A method in accordance with claim 16, further comprising the step of:

using the control and status information for switching data transmission from the free-space optical path to the backup communication path.

18. (Original): A method in accordance with claim 16, wherein content of the control and status information is set according to a communication protocol.

19. (Original): A method in accordance with claim 15, wherein the step of transmitting data through a backup communication path comprises the step of:

transmitting data in a radio frequency (RF) signal through an RF path of the communication link.

20. (Original): A method in accordance with claim 15, further comprising the step of:

updating a control packet based on an assessed characteristic of a received optical signal.

21. (Original): A method in accordance with claim 15, further comprising the step of:

determining whether or not there is detected degradation of the optical signal based on a control packet that is updated based on an assessed characteristic of a received optical signal.

22. (Original): A method in accordance with claim 15, wherein the step of detecting degradation of the optical signal comprises the step of:

sensing a characteristic of a received optical signal.

23. (Original): A method in accordance with claim 22, further comprising the step of:

using the characteristic of the received optical signal to calculate a power adjustment for a station at an opposite end of the communication link.

24. (Original): A method in accordance with claim 15, wherein the free-space optical path is subjected to atmospheric conditions.

25. (Currently amended): An apparatus for use in communications, comprising:

means for transmitting data in an optical signal through a free-space optical path of a communication link extending through a terrestrial free-space region;

means for detecting degradation of the optical signal; and

means for transmitting data through a backup communication path in response to detected degradation of the optical signal;

wherein the backup communication path is active and transmitting while data is being transmitted in the optical signal.

26. (Original): An apparatus in accordance with claim 25, further comprising:

means for communicating control and status information in the backup communication path concurrently with the transmission of data in the optical signal.

27. (Original): An apparatus in accordance with claim 26, further comprising:

means for using the control and status information for switching data transmission from the free-space optical path to the backup communication path.

28. (Original): An apparatus in accordance with claim 26, wherein content of the control and status information is set according to a communication protocol.

29. (Original): An apparatus in accordance with claim 25, wherein the means for transmitting data through a backup communication path comprises:

means for transmitting data in a radio frequency (RF) signal through an RF path of the communication link.

30. (Original): An apparatus in accordance with claim 25,

further comprising:

means for updating a control packet based on an assessed characteristic of a received optical signal.

31. (Original): An apparatus in accordance with claim 25, further comprising:

means for determining whether or not there is detected degradation of the optical signal based on a control packet that is updated based on an assessed characteristic of a received optical signal.

32. (Original): An apparatus in accordance with claim 25, wherein the means for detecting degradation of the optical signal comprises:

means for sensing a characteristic of a received optical signal.

33. (Original): An apparatus in accordance with claim 32, further comprising:

means for using the characteristic of the received optical signal to calculate a power adjustment for a station at an opposite end of the communication link.

34. (Original): An apparatus in accordance with claim 25, wherein the free-space optical path is subjected to atmospheric conditions.

35. (Currently amended): An apparatus for use in communications, comprising:

an optical transceiver configured to transmit data in an optical signal through a free-space optical path of a communication link extending through a terrestrial free-space

region;

the optical transceiver further configured to detect degradation of a received optical signal; and

interface circuitry coupled to the optical transceiver that is configured to send data through a backup communication path in response to detected degradation of the received optical signal;

wherein the backup communication path is active and transmitting while data is being transmitted in the optical signal.

36. (Original): An apparatus in accordance with claim 35, wherein the backup communication path comprises a radio frequency (RF) path.

37. (Original): An apparatus in accordance with claim 35, wherein the optical transceiver is further configured to update a control packet based on an assessed characteristic of the received optical signal.

38. (Original): An apparatus in accordance with claim 35, wherein the interface circuitry is further configured to determine whether or not there is detected degradation of the received optical signal based on a control packet updated by the optical transceiver.

39. (Original): An apparatus in accordance with claim 35, wherein the optical transceiver is further configured to use an assessed characteristic of the received optical signal to calculate a power adjustment for a station at an opposite end of the communication link.

40. (Original): An apparatus in accordance with claim 35, wherein the optical transceiver is further configured to transmit data in the optical signal through a free-space optical path of the communication link that is subjected to atmospheric conditions.

41. (Currently amended): An apparatus for use in communications, comprising:

an optical transceiver configured to transmit data in an active mode in an optical signal through a free-space optical path of a communication link extending through a terrestrial free-space region;

the optical transceiver further configured to detect degradation of a received optical signal; and

interface circuitry coupled to the optical transceiver that is configured to automatically switch from the active mode to a standby mode in response to detected degradation of the received optical signal;

wherein the standby mode includes transmitting data in a radio frequency (RF) signal through a free-space RF path of the communication link;

wherein an RF transceiver for generating the RF signal is active during the active mode and transmitting.

42. (Original): An apparatus in accordance with claim 41, wherein the optical transceiver is further configured to update a control packet based on an assessed characteristic of the received optical signal.

43. (Original): An apparatus in accordance with claim 41, wherein the interface circuitry is further configured to determine whether or not there is detected degradation of the

received optical signal based on a control packet updated by the optical transceiver.

44. (Original): An apparatus in accordance with claim 41, wherein the optical transceiver is further configured to use an assessed characteristic of the received optical signal to calculate a power adjustment for a station at an opposite end of the communication link.

45. (Original): An apparatus in accordance with claim 41, wherein the optical transceiver is further configured to transmit data in the optical signal through a free-space optical path of the communication link that is subjected to atmospheric conditions.